Senior Engineering Technician



Job Code: 4411 Grade: 129

Reports to: Engineering Services Director

Salary Range: \$51,350 - \$78,767

FLSA Status: Non-Exempt

GENERAL STATEMENT OF DUTIES

Performs intermediate technical field and administrative work in the preparation and maintenance of engineering drawings and records and performing sub-professional engineering work and other related functions; does related work as required.

DISTINGUISHING FEATURES OF THE CLASS

An employee in this classification is required to exercise independent judgment in resolving routine situations, but problems of a difficult or complex technical nature are referred to professional supervisors.

ESSENTIAL FUNCTIONS

Preparing engineering drawings, plats, and maps; preparing documents from survey data, deeds, and legal descriptions; monitoring infrastructure; assisting with traffic studies; estimating engineering quantities; preparing and maintaining computerized records and files on capital projects and other matters.

EXAMPLES OF WORK

- Performs routine to moderately complex engineering analysis and prepares technical reports.
- Inspects and monitors school safety and street lights; arranges for repair, replacement, or relocation.
- Coordinates the programming, placement, and collecting of traffic monitoring equipment.
- Provides data for traffic studies.
- Prepares technical specifications and prepares cost and material estimates for public works projects.
- Executes or assists in the preparation of plans, drawings and specifications for a variety of public works projects.
- Prepares contract documents and specifications, maintaining project and pay records.
- Performs field surveys and inspections.
- Monitors and inventories current road conditions and estimates repair costs.
- Prepares plan and profile sheets from field notes for engineering projects.
- Prepares legal documents from survey notes, deeds, and legal descriptions.
- Prepares City standard drawings for work to be accomplished in accordance with City specifications.
- Prepares overlays and special maps and drawings from instructions.
- Performs or assists in preliminary layouts and drawings, using engineering criteria, survey notes and basic instructions.
- Reduces field notes and makes topographical and plot layouts from notes.
- Maintains detailed records.
- Computes quantities in connection with layouts.
- Provides information to public and other City offices relating to construction and engineering projects, land and property records and maps.
- Performs related tasks as required.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES

General knowledge of engineering maps and records; general knowledge of the terminology, methods, practices, and techniques of engineering drafting; some knowledge of trigonometry as applied to the computation of angles, areas, distances, and traverses; ability to make complex arithmetic calculations; ability to use survey instruments; ability to understand and work from oral and written instructions and sketches; skill in freehand and mechanical lettering and in the use of drafting instruments.

MINIMUM EDUCATION AND EXPERIENCE

Graduation from an accredited college or university with an Associate's Degree in Drafting, Civil Engineering, Environmental Management or related field. Three (3) years of progressively responsible and knowledgeable experience in paraprofessional engineering functions in an environmental, stormwater, public utilities or related field; or any equivalent combination of education, training, and experience.

WORK CONDITIONS

- Light work requiring the exertion of up to 20 pounds of force occasionally, up to 10 pounds of force frequently, and a negligible amount of force constantly to move objects.
- Work requires stooping, reaching, fingering, grasping, and repetitive motions.
- Vocal communication is required for expressing or exchanging ideas by means of the spoken word.
- Hearing is required to perceive information at normal spoken word levels.
- Visual acuity is required for preparing and analyzing written or computer data, use of measuring devices, determining the accuracy and thoroughness of work, and observing general surroundings and activities.
- The worker is subject to inside and outside environmental conditions.

SPECIAL REQUIREMENTS

- Possession of an appropriate driver's license valid in the State of Maryland.
- An employee in this classification is subject to random drug and alcohol testing pursuant to the City of Gaithersburg's Drug-Free Workplace Policy, Drug & Alcohol Testing Procedures.

This is a class specification and not an individualized job description. A class specification defines the general character and scope of duties and responsibilities of all positions in a job classification. The list of essential functions/examples of work, as outlined herein, is intended to be representative of the tasks performed within this classification. It is not necessarily descriptive of any one position in the class. The omission of an essential function does not preclude management from assigning duties not listed herein if such functions are a logical assignment to the position.

Revised 03/01/2009

The City of Gaithersburg is an Equal Opportunity Employer. In compliance with Equal Employment Opportunity guidelines and the Americans with Disabilities Act, the City of Gaithersburg provides reasonable accommodation to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer.

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